2 December 87

TO: X3T9.2 SCSI-2 COMMITTEE

X3T9.2/87-208

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SUBJECT: Write Same capability in Send and Receive Diagnostic commands (versus Write Same command).

This proposal provides a means of executing the write same operation as a diagnostic command. The paging capability is described in Paul Nitza's proposal 87-126. Page 41h is the page indicated here as Write Same Page (see 87-126 for command format).

The proposal is a version of Donna Pope's (87-173) except that the standard Check Condition/ Request Sense method is used to determine the failing block (NOT Receive Diagnostic).

1. Add page 41h for Write Same Format to Send Diagnostic command.

| Table 7- : SEND DIAGNOSTIC - Page Format for Write Same | | | | | | | | |
|---|-----------------|------|----------------|------------|-----------|----------|---------|------|
| Bit Byte | 7 | 6_ | 5 | 4 | 3 | 2 _ | 1 | 0 |
| 0 | Page Code (41h) | | | | | | | |
| 1 | 8 | · 5/ | ib je i | Rese | rved | | | |
| 2 | (MSB) | | | | | | | |
| 3 | | | Starti | ng Logica | 1 Block A | Address | | |
| 4 | | | Starti | ng Logica | 1 Brock 7 | (ddi Coo | | |
| 5 | (LSB) | | | | | | | |
| 6 | (MSB) | | Nur | nber of Bl | ocks to 1 | Write | | |
| 7 | (LSB) | | NUII ====== | ======= | :====== | ======= | ======= | |

The Starting Logical Block Address specifies the logical block at which the write operation shall begin.

Only one logical block of data shall be sent during the Data Out Phase regardless of the transfer length. This will be used to write all the contiguous blocks indicated in the description. This logical block of data shall be sent immediately after the Page 41h parameters and prior to any subsequent pages and/or other information.

The Transfer Length specifies the number of contiguous logical blocks to be written. All logical blocks written shall be written with the same data as the first logical block. A transfer length of zero shall indicate that the data be continuously written from the starting logical block address specified in the parameter list to the last logical block addressable.

If any of the following conditions occur, this command shall be terminated with a CHECK CONDITION status and the sense key shall be set as indicated in the following table. This table does not provide an exhaustive enumeration of all conditions that may cause the CHECK CONDITION status.

| Condition | Sense Key | | |
|---|----------------------------|--|--|
| Invalid logical block address | ILLEGAL REQUEST (see note) | | |
| Target reset or medium change since the last command from this initiator. | UNIT ATTENTION | | |
| Overrun or other error that might be resolved by repeating the command. | ABORTED COMMAND | | |

NOTE: The extended sense information bytes shall be set to the logical block address of the first invalid address. In this case, no data shall be written on the logical unit.

- Delete WrtSme bit and description from WRITE (EXTENDED) and WRITE AND VERIFY commands in section 8.
- 3. Delete WrtSme bit and description from WRITE (10 byte), WRITE (12byte), WRITE AND VERIFY (10 byte), and WRITE AND VERIFY (12 byte) commands in section 15.
- 4. Restore Erase-By-Pass (EBC) bit in the same four commands mentioned in item 3 (bit 2 of byte 1).